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| APPLICATION N | 0. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------|-----------------|-------------|-------------------------|---------------------|------------------|--|
| 10/796,958 | | 03/11/2004 | Tadahiko Nishimukai | 29273/566 | 4012 | |
| 23838 | 7590 | 10/06/2006 | | EXAM | EXAMINER | |
| _ | | YON LLP | PATEL, H | PATEL, HETUL B | | |
| SUITE 70 | TREET N.V 00 | <i>w</i> . | ART UNIT | PAPER NUMBER | | |
| WASHIN | GTON, D | C 20005 | 2186 | | | |
| • | | | DATE MAILED: 10/06/2006 | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. Applicant(s) | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| | 10/796,958 | NISHIMUKAI ET AL. | | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | | |
| | Hetul Patel | 2186 | | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | | | |
| Status | | | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 11 Ma | arch 2004. | | | | | | | |
| | action is non-final. | | | | | | | |
| 3) Since this application is in condition for allowar | | secution as to the merits is | | | | | | |
| closed in accordance with the practice under E | • | | | | | | | |
| Disposition of Claims | | | | | | | | |
| · _ | | | | | | | | |
| 4) Claim(s) <u>1-20</u> is/are pending in the application. | un forme consideration | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | |
| 6) Claim(s) 1-20 is/are rejected. | | | | | | | | |
| • | 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| are subject to restriction and/or | election requirement. | | | | | | | |
| Application Papers | | | | | | | | |
| 9)⊠ The specification is objected to by the Examine | r. | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>11 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is ob | ected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)□ All b)□ Some * c)⊠ None of: | | | | | | | | |
| 1. ☐ Certified copies of the priority documents | s have been received | | | | | | | |
| 2. Certified copies of the priority documents | | on No | | | | | | |
| 3. Copies of the certified copies of the prior | | | | | | | | |
| application from the International Bureau | • | a in the Hadenar Stage | | | | | | |
| * See the attached detailed Office action for a list | | ed. | | | | | | |
| | | - | | | | | | |
| | | | | | | | | |
| Attachment(s) | | | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. | | | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 03/11/2004. | 5) Notice of Informal F 6) Other: | atent Application | | | | | | |
| Paper No(s)/Mail Date <u>03/1//2004</u> . | ол ошел | | | | | | | |

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 03/15/1985. It is noted, however, that applicant has not filed a certified copy of the 60-50512 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

3. The information disclosure statement filed 03/11/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

- 4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is

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requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3-11, 13-14, 15-24, 46-54, 56 and 58-67 of U.S. Patent No. 6,779,102 in view of Kneib et al. (USPN: 4,439,839) hereinafter, Kneib.

Claims 1-20 of the instant application are rejected under judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-11, 13-14, 15-24, 46-54, 56 and 58-67 of U.S. Patent No. 6,779,102 in view of Kneib.

Although the conflicting claims are not identical, they are not patentably distinct from

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each other because, as shown in the table below, claims 3-11, 13-14, 15-24, 46-54, 56 and 58-67 of U.S. Patent No. 6,779,102 contains every element of claims 1-20 of the instant application except the limitation of the data processor executing an instruction that is stored in a main memory with other instructions, wherein the main memory is being external to the data processor and an address of the main memory is a physical address.

| Current Application | US Patent: 6,779,102 | | | | | |
|------------------------|----------------------|-------|-------|-------|--|--|
| 1, 11 | 3+4 | 15+24 | 46+47 | 58+67 | | |
| 2, 12 | 5 | 16 | 48 | 59 | | |
| 3, 13 | 6 | 17 | 49 | 60 | | |
| 4 | 7 | 18 | 50 | 61 | | |
| 5, 14 | 8 | 19 | 51 | 62 | | |
| 6, 15 | 9 | 20 | 52 | 63 | | |
| 7, 16 | 10 | 21 | 53 | 64 | | |
| 8, 17 | 11 | 22 | 54 | 65 | | |
| 9, 19 | 3+14 | 15+24 | 46 | 67 | | |
| 18 | 13 | 23 | 56 | 66 | | |
| 10, 20 | 3 | 24 | 46 | 67 | | |

The Kneib prior art, however, teaches that the data processor (i.e. DPPE as shown in Fig. 1A) executes an instruction that is stored in a main memory (i.e. the external memory) with other instructions, wherein the main memory is being external to the data processor and an address of the main memory is a physical address (inherent) (e.g. see Col. 2, lines 10-20 and Fig. 1a). It would have been obvious to use an external main memory as taught by Kneib in the data processor taught by the US Patent

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6,779,102 so it would avoid (i) the need of the small and expensive cache memory; and

(ii) the data latency by directly accessing instruction(s) from the hard drive.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Roskell et al. (USPN: 4,532,587) also discloses a processor executing instructions from an external memory.
- ➤ Mothersole et al. (USPN: 4,729,093) also discloses a processor executing instructions from an external memory.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HBP

MATTHEW KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100